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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,088

02/26/2004

Yi-Fan Chen

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EXAMINER

NGUYEN, KEVIN M

ART UNIT

PAPER NUMBER

2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/786,088	<b>Applicant(s)</b> CHEN ET AL.	
	<b>Examiner</b> Kevin M. Nguyen	<b>Art Unit</b> 2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 6-8, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki (US 7,110,001) in view of Sakuta et al (US 7,142,226 hereafter Sakuta).

3. As to claim 1, Sasaki teaches a color correction circuit for a liquid crystal display comprises:

(a) a color selection unit (a memory HR (0-63) 10a, fig. 14), color temperature values (col. 12, lines 1-6), and ratio of the tristimulus value obtained by measuring the highest gray scale individually, col. 11, lines 33-40,

(b) a parameter register unit (a register HR (0) 10b, fig. 14),

(c) a color signal function-calculation unit (a weight calculator 3b, fig. 14),

(d) a color signal output unit (R',G',B', fig. 2),

the operation of said elements (a)-(d) process the functions and sub function, and calculate for the output values of the correction color/characteristics of the LCD as discussed in col. 19, lines 16-67.

Sasaki fails to teach color temperature values.

Sakuta teaches a color correction for LCD in which a parameter table has color temperature values with respect to gamma parameter values, as discussed in fig. 2, col. 6, lines 25-33, and col. 1, lines 7-11.

4. As to claim 2, Sasaki teaches a memory 10a, fig. 14.

5. As to claim 4, Sasaki teaches a comparator (a selector 3a), an adder (+), and a multiplier (x), fig. 14.

6. As to claim 6, Sasaki teaches the color correction including Red, Green, and Blue corrections (3, 4, and 5, fig. 2).

7. The limitation of claim 7 are similar to those of claim 1, though in method form, therefore the rejection of claim 7, will be treated using the same rationale as claim 1.

8. Claim 8 shares the same limitations as those of claim 2 and therefore the rationale for rejection will be the same.

9. Claim 10 shares the same limitations as those of claim 4 and therefore the rationale for rejection will be the same.

10. Claim 12 shares the same limitations as those of claim 6 and therefore the rationale for rejection will be the same.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Sakuta into Sasaki to create the claimed invention. It would have been obvious to modify Sasaki to have the color correction for LCD in which a parameter table has the color temperature values with respect to the gamma parameter values as taught by Sakuta, because this would improve the high quality of the color resolution being displayed.

11. Claims 3, 5, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki in view of Sakuta as applied to claim 1 above, and further in view of Lee et al (US 7,030,846 hereinafter Lee).

As to claim 3, the combination of Sasaki and Sakuta teaches all of the claimed limitation, except for a parameter register unit is SRAM. Lee teaches a color correction 110 for LCD which a RAM 132 as discussed in fig. 17, col. 12, lines 1-18.

As to claim 5, Lee teaches a dithering technique 122, fig. 17.

Claim 9 shares the same limitations as those of claim 3 and therefore the rationale for rejection will be the same.

Claim 11 shares the same limitations as those of claim 5 and therefore the rationale for rejection will be the same.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Sasaki and Sakuta to have the RAM 132 and the dithering technique 122 as taught by Lee, because this would improve the high quality of the color image being displayed.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN M. NGUYEN whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, a supervisor RICHARD A. HJERPE can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kevin M. Nguyen  
Patent Examiner  
Art Unit 2629

KMN  
April 17, 2007